WHAT IS CLAIMED IS:

1. A steer-by-wire system having a steering handle disconnected mechanically from steerable road wheels; a steering actuator for steering said steerable road wheels in dependence on the steering angle of said steering handle; a reaction force generating actuator for applying steering reaction force to said steering handle; reaction force control means for controllably driving said reaction force generating actuator; and drive electric current restraining means for restraining the drive electric current to said steering actuator while the same is in the sate of being overloaded;

wherein said reaction force control means drives said reaction force generating actuator so that in an ordinary state, the steering reaction force is controlled to correspond to the drive electric current applied to the steering actuator and so that while said drive electric current restraining means restrains the drive electric current to said steering actuator, the steering reaction force is controlled to be increased larger than that in said ordinary state.

2. The steer-by-wire system as set forth in Claim 1, wherein said drive electric current restraining means restrains the drive electric current to said steering actuator while the same is brought into the state of being overloaded as a result of being heated beyond a predetermined temperature.

3. The steer-by-wire system as set forth in Claim 1, further comprising:

state notification means for notifying a vehicle driver of the change of state by making the ratio of the steering angle of said steerable road wheels to the steering angle of said steering handle smaller than that in said ordinary state while said drive electric current restraining means restrains the drive electric current to said steering actuator.

4. A control program for a steer-by-wire system having a steering handle disconnected mechanically from steerable road wheels; a steering actuator for steering said steerable road wheels in dependence on the steering angle of said steering handle; a reaction force generating actuator for applying steering reaction force to said steering handle; reaction force control means for controllably driving said

reaction force generating actuator; and drive electric current restraining means for restraining the drive electric current to said steering actuator while the same is in the sate of being overloaded; said control program comprising the steps of:

detecting whether or not said drive electric current restraining means restrains the drive electric current to said steering actuator;

driving said reaction force generating actuator so that said steering reaction force is controlled to correspond to the drive electric current to said steering actuator while said drive electric current restraining means does not restrain the drive electric current to said steering actuator;

driving said reaction force generating actuator so that said steering reaction force is controlled to be increased while said drive electric current restraining means restrains the drive electric current to said steering actuator; and

making the ratio of the steering angle of said steerable road wheels to the steering angle of said steering wheel smaller than that in said ordinary state while said drive electric current restraining means restrains the drive electric current to said steering actuator.